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THE TEMPLETON CROCKER EXPEDITION TO WESTERN POLYNESIAN AND MELANESIAN ISLANDS, 1933

No. 15

NOTES ON THE REPTILES AND AMPHIBIANS, WITH THE DESCRIPTION OF A NEW SPECIES OF SEA-SNAKE

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The following paper is based on a collection of reptiles and amphibians made on the Templeton Crocker Expedition to the Solomon Islands on board the yacht Zaca in 1933 and very generously donated by Mr. Crocker to the California Academy of Sciences. While the bulk of the collection is from the Solomon Islands the Santa Cruz Islands, Palmyra Island, lying to the south and west of the Hawaiians, and Danger or Pukapuka Island, lying to the north and east of the Samoans, are also represented.

The thanks of the author are due Mr. Crocker and the crew of the Zaca for the privilege of studying this interesting collection, and especially to Mr. Maurice Willows Jr. upon whom fell the work of caring for and preserving the specimens.

The collections of Guppy and Woodford first brought to the notice of herpetologists the unique character of the reptile and amphibian fauna of the Solomons. At various times collectors have visited the group, the Whitney South Sea Expedition making investigations on some thirty-five islands. Since the collections made by the Crane Pacific and the Whitney South Sea expeditions no new species have been discovered until the Templeton Crocker Expedition secured a new species of sea-snake from Lake Tungano, Rennell Island. Several islands, from which there seem to be no records, in

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both the Solomon and Santa Cruz groups were visited, thus increasing our knowledge of the distribution of the reptiles and amphibians of this most interesting region.

Like the previous collections made in the Solomon Islands the present one substantiates the theory that the reptile and amphibian fauna shows a Papuan rather than an Australian origin.

List of species from the SOLOMON and SANTA CRUZ groups, including additional records in distribution.

Hyla thesaurensis Peters

Malaita, 1 specimen.

Ceratobatrachus guentheri Boulenger

Malaita, 65 specimens.

Rana bufoniformis Boulenger

Ugi, 1 specimen.

Rana guppyi Boulenger

Malaita, 19 specimens.

Rana solomonis (Boulenger)

Malaita, 1 specimen.

Rana krefftii Boulenger

Guadalcanar, 1 specimen; Malaita, 4 specimens.

Gonocephalus godeffroyi (Peters)

Ugi, 2 specimens; Santa Anna, 1 specimen.

Gehyra oceanica (Lesson)

Bellona, 3 specimens; Guadalcanar, 1 specimen; Lomlom, 1.

Gekko vittatus Houttuyn

Bellona, 1 specimen; San Cristoval, 1; Ugi, 1; Rennell, 2 specimens.

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Lepidodactylus guppyi Boulenger

Rennell, 1 specimen.

Cryptoblepharus boutonii poecilopleurus (Wiegmann)

Rennell, 5 specimens.

Dasia smaragdina perviridis Barbour

Lomlom, 1 specimen; Nupani, 1; Nalago, 1.

Emoia cyanogaster (Lesson)

San Cristoval, 5 specimens; Lomlom, 3; Malaita, 4; Anuda 2; Santa Anna, 1 specimen; Ugi, 1.

Emoia cyanura (Lesson)

Guadalcanar, 5 specimens; Bellona, 14; San Cristoval, 14; Ugi, 3; Rennell, 7; Malaita, 8; Anuda, 3; Matema, 6; Lomlom, 2; Vanikoro, 1 specimen.

Emoia nigra (Hombron and Guichenot)

Guadalcanar, 7 specimens; Bellona, 16; Rennell, 14; Lomlom, 14; Malaita, 14; Anuda, 2; Matema, 13; Vanikoro, 2; Nupani, 2; Nalago, 1 specimen.

Emoia atrocostata (Lesson)

Bellona, 1 specimen.

Emoia werneri (Vogt)

San Cristoval, 2 specimens.

Leiolopisma anolis (Boulenger)

Ugi, 1 specimen.

Leiolopisma noctua (Lesson)

Guadalcanar, 1 specimen.

Sphenomorphus concinnatus (Boulenger)

Malaita, 3 specimens.

Varanus indicus (Daudin)

Rennell, 2 specimens; Guadalcanar, 1 specimen; Malaita, 1.

Enygrus australis (Montrouzier)

Lomlom, 10 specimens.

Enygrus carinatus (Schneider)

Malaita, 8 specimens; Bellona, 1 specimen.

Boiga irregularis (Merrem)

Guadalcanar, 2 specimens.

Laticauda colubrina (Schneider)

Malaita, 2 specimens; Lomlom, 1 specimen.

Laticauda crockeri Slevin, new species.

Diagnosis.—Body compressed, markedly so posteriorly; head scarcely distinct from neck; snout elongate, rounded at tip; nasal large, occupying most of the posterior part of the nasal plate; no azygous prefrontal present; tip of third labial touching the eye, the fourth broadly in contact; rostral as high as broad; genials equal in length, the posterior ones not broadly in contact; gastrosteges two and one-half times as broad as long, with lateral keel anteriorly.

Scales smooth, in 21 rows; gastrosteges 199; urosteges 39; anal divided; upper labials 7-7; lower labials 8-8; preoculars 1-1; postoculars 2-2; sex σ^3 . Color uniform dark-brown, with yellowish anal plate. Total length 479 mm.; tail 64 mm.

Type: No. 72001 Mus. Calif. Acad. Sci., **Lake Tungano, Rennell Island, Solomon Islands.** Collected by the crew of the yacht *Zaca* June 8, 1933 and named for Mr. Templeton Crocker, Patron of the Academy.

This species may be readily distinguished from the other members of the genus by the elongate head, the uniform coloration and the more rounded snout.

Lake Tungano, situated about two miles inland from the east point of Rennell Island, is described as a body of water about ten miles in length and entirely separated from the sea. Visitors to the island found the water too salty for drinking purposes though it is used for drinking by the natives. Soundings taken have shown no bottom at thirty fathoms. The elevation of the lake is supposed to be about sea-level. Mr. L. A. Penn, of the Associated Oil Company, very kindly examined a water sample from the lake and gives the following analysis:

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Radicles	Parts per Million
Sodium	
Calcium	110.0
Magnesium	230.0
Sulphate	460.0
Chloride	
Bicarbonate	
Colloids	
Silica	10.0
Iron and Alumina	
Mineral Content	
Total Solids	6650. 0

Hydrophis ornatus (Gray)

Guadalcanar, 1 specimen; Malaita, 1.

Hydrophis faciatus atriceps (Smith)

Malaita, 1 specimen.

DANGER AND PALMYRA ISLANDS

DANGER ISLAND

Gehyra oceanica (Lesson)

7 specimens.

Peropus mutilatus (Wiegmann)

1 specimen.

Lepidodactylus lugubris (Duméril and Bibron)

2 specimens.

Emoia cyanura (Lesson)

21 specimens.

Leiolopisma noctua (Lesson)

4 specimens.

PALMYRA ISLAND

Lepidodactylus lugubris (Duméril and Bibron)

5 specimens.

Those who are interested in the herpetology of the Solomon Islands should refer especially to the following papers:

Barbour, T.

1921. Reptiles and Amphibians from the British Solomon Islands. Proc. New England Zool. Club, Vol. VII, pp. 91-112, pls. 2-6.

Kinghorn, J. R.

1928. Herpetology of the Solomon Islands. Records of the Australian Museum, Vol. XVI, No. 3, pp. 123-178, figs. 1-35, pls. 13-15.

Burt, Charles E. and May Danheim.

1932. Herpetological Results of the Whitney South Sea Expedition. VI. Bull. Amer. Mus. Nat. Hist., Vol. LXIII, Art. 5.